Attendance: see attendee list

- On the Phone:
  - Tom Stanton, NRRI
  - o Brad Klein, ELPC
  - Nathan Geisler –City of Ann Arbor
  - Wayne Appleyard Ann Arbor Energy Commission
  - o Eric Keller
  - Sara Bertram Sunrun
  - Liesle Clark 5 Lakes
- Value of Solar (VOS) Subgroup Update Julie Baldwin (Staff Chair)
  - Solar Working Group Website
  - www.michigan.gov/renewables then Solar then Solar Working Group
  - Key VOS documents are posted on web page
  - Minnesota Value of Solar: Methodology & IREC Calculating the Benefits and Costs of Distributed Solar Generation are good documents to review.
  - First meeting of the VOS Subgroup will be today from 12 1:15.
- Solar Tariff and Rate Impact Subgroup Update Kevin Krause (Staff Chair)
  - The group's first meeting will be from 12 1 after the March 18 Solar Working Group Meeting
- Program Design Subgroup Jesse Harlow (Staff Chair)
  - Jesse gave a presentation describing Consumers Energy's and DTE's solar programs and the group's homework assignment.
  - o Jesse Harlow's Presentation
  - Dave Konkle gave a presentation on Community Solar and GLREA's Guidebook for Community Solar Programs in Michigan
  - o Dave Konkle's Presentation
- Karl Rabago Rabago Energy, LLC
  - o Karl Rabago's Presentation: Include link to Karl's Presentation Here
  - Question/Answers <u>Karl Rabago's Presentation</u>
  - Q. How much do customers care about changing the VOS rate annually?
  - A. Austin Energy took a flat rate and set it for 10 years. There was some concern with keeping the rate which is wrong as soon as it is set for 10 years. Keep in mind that the net metering credit changes frequently too based on rate cases. Austin energy only did VOS tariff rate for 10 years for residential solar. This level of certainty helped with financing. There are other vactors to consider and ways to do commercial VOS. The VOS rate can be set for 10, 20 or 30 years.
  - Q. How is the intermittent nature of solar incorporated into the rate?

- A. Intermittence is handled with ELCC (effective load carrying capacity) determination.
- Q. Are the valuation components subjective?
- A. Not on the big components like energy and capacity.
- Q. What about stranded costs?
- A. You can't deny that customers are doing what the utility thought they would be doing with rate based assets. Evaluate the impact and decide what to do when program gets bigger.
- Q. What happens to the VOS when you get a lot of solar?
- A. If you get a lot of solar the value of solar will decrease. 10% solar is around the level where negatives start to be included. Recommend looking at this around 5%.

Commenter: I acknowledge that this conversation is being set up to be either net metering or VOS. We have a statutory net metering program. We are looking for the best new sustainable approach like VOS. The VOS approach takes a while. In this work group we need to decide the interim step to avoid stagnation. Our outcome needs to have two pieces: immediate expansion to keep up the market and longer term development of a VOS. Need a short term expansion too.

- Q. Would a good first step be to go to net billing (net billing is an arrangement where the customer is billed for all of their usage according to their utility tariff and receives a credit equal to the VOS based on their solar generation)?
- A. Yes.
- Q. What about limits on program size?
- A. Austin Energy's tariff had a 20 kW limit for residential and 200 kW for commercial.
- Q. How did Austin Energy accommodate the influx of solar on their system from an administrative standpoint?
- A. Austin Energy had mandatory monthly meetings with installers to help with adding 1-2 MW of solar each year.
- Q. What about billing costs?
- A. Watch for those costs. It's hard to estimate ahead of time.
- Q. What about system sizing and zeroing out credits at the end of the year?
- A. Austin Energy designed the VOS program to offset use. If a customer wants to be in the solar business, that changes things from a tax standpoint. A rule of thumb is that tax law differentiates based on an 80 20 rule. Generally, if you generate 80% on site, it may be

considered solar for use (this is not an actual law). TX also had a property tax exemption for solar generation for use. At the end of the year, any remaining balance is wiped out. Austin Energy is considering rolling it over perpetually.

- Q. Does Austin Energy have community solar or virtual net metering?
- A. Now looking at it however, they have a really good green power program (10 years at a fixed price that substitutes for the fuel factor price).
- Q. Disruptive Influences report so much commentary about Wall Street impact on IOU. Any thoughts?
- A. Stability has been reducing for a while. Rethinking the business model and maintaining the utilities is something regulators should consider. Doesn't see any utility hurt by distributive solar within the next 5 years.
- There was not enough time to identify tasks to complete before the next meeting. The group agreed to work on this via email.